REMARKS

Applicant wishes to thank the Examiner for the telephonic interview of August 13, 2004. Applicant's representatives Mark Kirkland and Alexander Fishkin, and Examiner James Thompson participated in the interview. Claims 1 and 24, and U.S. 6,031,544 (Yhann.) and U.S. 5,412,877 (McKendrick) were discussed. No agreement was reached.

Claims 1-26 are pending in this application. Claims 24 and 26 are rejected under U.S.C. 102(a) as being anticipated by Yhann (US 6,031,544). Claims 1-8, 20-23 and 25 are rejected under 35 U.S.C 103(a) as being unpatentable over Yhann (US Patent 6,031,544) in view of McKendrick (US Patent 5,412,877). Claim 9 is rejected under 35 U.S.C 103(a) as being unpatentable over Yhann (US Patent 6,031,544) in view of McKendrick (US Patent 5,412,877) and Yeomans (US Patent 5,402,534).

Claims 1 and 23-26 have been amended. The specification has been amended to account for typographical errors. No new matter has been added. Applicant respectfully traverses the rejections and requests reconsideration in view of the amendments and following remarks.

Claim 24

Claim 24, as amended, recites a method of forming a trap polygon for trapping a color transition edge. The method includes identifying an interfering edge, which intersects a keep away zone define by the color transition edge. The method further includes calculating a line on which traps from the color transition edge and the interfering edge would optimally abut one another. The method further includes shaping a trap polygon using the calculated line such that when the trap polygon corresponding to the interfering edge is subsequently formed, the trap polygon associated with the color transition edge does not have to be reshaped.

Yhann describes a method of performing trapping for a page including objects using a vector map representation of the page information. The method includes creating a sequence of trap polygons for the contours of object, painting the trap polygons with colors that are comprised of inks on the left and right sides of the object contours. The method further includes reshaping intersecting trap polygons (column 6, lines 48-49), requiring that once a trap polygon is shaped for a given contour segment (e.g., color transition edge), it may have to be reshaped

when a trap polygon for another contour segment (e.g., interfering edge) is created. Yhann does not teach or suggest shaping a trap polygon for a color transition edge such that when the trap polygon corresponding to an interfering edge is subsequently formed, the trap polygon associated with the color transition edge does not have to be reshaped, as recited in claim 24. For at least this reason, claim 24 is allowable.

Claim 26

Claim 26, as amended recites, a computer program for forming a trap polygon for trapping a color transition edge. The computer program includes instructions to identify an interfering edge which intersects a keep away zone define by the color transition edge. The computer program further includes instructions to calculate a line on which traps from the color transition edge and the interfering edge would optimally abut one another. The computer program further includes instructions to shape a trap polygon using the calculated line such that when the trap polygon corresponding to the interfering edge is subsequently formed, the trap polygon associated with the color transition edge does not have to be reshaped.

The method describe by Yhann for performing trapping for a page including objects using a vector map representation of the page information can be implemented in a computer program. As explained above, however, the method described by Yhann does not include shaping a trap polygon for a color transition edge such that when the trap polygon corresponding to an interfering edge is subsequently formed, the trap polygon associated with the color transition edge does not have to be reshaped. For at least this reason, claim 26 is allowable.

Claim 1

Claim 1, as amended recites a method of forming a trap polygon for trapping a color transition edge that includes shaping the trap polygon to avoid overlapping a trap polygon corresponding to an interfering edge. Shaping the trap polygon includes determining a miter equation that defines a line that is half a distance from the color transition edge and the interfering edge along a length of either edge. Shaping the trap polygon further includes determining movement equations for movement points, where movement points are points on the trap polygon that need to move due to the proximity of the interfering edge. Shaping the trap

polygon further includes moving each movement point to an intersection of a movement equation and the miter equation.

In rejecting claim 1, the Examiner concedes that Yhann does not disclose shaping a trap polygon by moving points on the trap polygon such that each moving point is moved to an intersection of a movement equation and the miter equation. The Examiner states that McKendrick teaches moving points on a polygon by locating each moving point at an intersection of a movement equation and the miter equation.

Moving a movement point on a trap polygon to an intersection of a movement equation and the miter equation, as set forth by the limitations of claim 1, requires moving the movement point *from* a position that is not on the line defined by the miter equation *to* a position on the line defined by the miter equation. Consequently, once the trap polygon is shaped, all movement points, that is, all points on the trap polygon that needed to move due to the proximity of the interfering edge are situated on the line defined by the miter equation. Moreover, none of the movement points are situated on the line defined by the miter equation prior to shaping the trap polygon.

The Examiner states that McKendrick teaches shaping a polygon for a segment of a tube when creating a bend in the tube at a particular angle. The Examiner further states that McKendrick teaches using segment miter lines to indicate the angles between segments of the tube. Even if the Examiner is correct, nothing in McKendrick teaches or suggests moving points on a polygon such that each moving point is moved from a position that is not on the miter line to a position on the miter line. It follows that McKendrick does not teach or suggest shaping a polygon by "determining movement equations for movement points, the movement points being points on the trap polygon that need to move due to the proximity of the interfering edge, and moving each movement point to an intersection of a movement equation and the miter equation", as recited in claim 1. For at least this reason, claim 1 and its dependent claims are allowable.

<u>Claim 23</u>

Claim 23, as amended, recites a method of adjusting a trap polygon for trapping an edge in view of an identified interfering edge. The method includes determining a miter equation that

is half a distance from the color transition edge and the interfering edge along the length of either edge. The method further includes determining movement equations for movement points, where movement points are points on the trap polygon that need to move due to the proximity of the interfering edge. The method further includes moving each movement point to an intersection of a movement equation and the miter equation.

As explained in reference to claim 1, McKendrick does not teach or suggest determining movement equations for movement points, the movement points being points on a trap polygon that need to move due to the proximity of an interfering edge, and moving each movement point to an intersection of a movement equation and the miter equation, as recited in claim 23. For at least this reason, claim 23 is allowable.

<u>Claim 25</u>

Claim 25, as amended, recites a computer program for forming a trap polygon for trapping a color transition edge. The trap polygon has an associated trap color determined by colors defining the color transition edge. The computer program is tangibly stored on a medium and includes instructions operable to cause a computer to form a trap polygon for trapping a color transition edge including shaping the trap polygon to avoid overlapping a trap polygon corresponding to an interfering edge. Shaping the trap polygon includes determining a miter equation that defines a line that is half a distance from the color transition edge and the interfering edge along a length of either edge. Shaping the trap polygon further includes determining movement equations for movement points, where movement points are points on the trap polygon that need to move due to the proximity of the interfering edge. Shaping the trap polygon further includes moving each movement point to an intersection of a movement equation and the miter equation.

As explained in reference to claim 1, McKendrick does not teach or suggest determining movement equations for movement points, the movement points being points on a trap polygon that need to move due to the proximity of an interfering edge, and moving each movement point to an intersection of a movement equation and the miter equation, as recited in claim 25.

Further as to claim 25, Yhann does not cure the deficiencies of McKendrick in that nothing in Yhann teaches or suggests determining movement equations for movement points, the movement points being points on a trap polygon that need to move due to the proximity of an interfering edge, and moving each movement point to an intersection of a movement equation and the miter equation, as recited in claim 25.

For at least the above reasons, claim 25 is allowable.

Applicant believes that all claims are now in condition for allowance and action to that end is respectfully requested.

Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

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